

428 CJ .vs. SCJ

What's the difference?

The 428 CJ and SCJ engines have always been an area of confusion for most people; however, this page will give you all the details and hidden secrets of determining a 428 CJ from a SCJ.

428's are part of the FE series family. No parts interchange with the 429's.

Some basic rules:

- The engine V.I.N. number (5th character from left) does not indicate if a certain car came with a CJ or SCJ engine. The only data this decodes is whether a car came with or without ram air.
- The SCJ was automatically installed if a 3.91 traction lock or 4.30 detroit locker rear axle was ordered. You can look at the door tag for axle codes V or W - however be careful, axle tags are being reproduced.

Component	CJ	SCJ	Comment
Engine oil cooler	No	Yes	Factory with SCJ. Not available on CJ.
Ram air	Optional	Optional	Optional on CJ and SCJ
Air conditioning	Optional	Not available	Oil cooler takes place of condensor on SCJ
Auto transmission	Optional	Optional	Same transmission used in CJ and SCJ
Manual transmission	Optional	Optional	Same transmission used in CJ and SCJ
Staggered rear shocks	Yes	Yes	With automatic transmission only
Detroit locker axle with 4.30 gear	No	Yes	Part of 428 SCJ Drag Pack option
Traction lock axle with 3.91 gear	No	Yes	Part of 428 SCJ Drag Pack option

Component	CJ	SCJ	Comment
Cast iron tailshaft with C6 trans.	Same	Same	
Big input close ratio 4-speed trans.	Same	Same	
Hydraulic camshaft	Same	Same	See page 14
Oil pan	Same	Same	Without windage tray
Intake manifold	Same	Same	Cast iron. See page 28-29
Carburetor	Same	Same	Holley 735 CFM. See page 32-34
Exhaust manifold	Same	Same	Cast iron hedder. See page 40-41
Engine block	Same	Same	See page 11
Cylinder heads	Same	Same	See page 21-23
Crankshaft *	CJ only	SCJ only	DIFFERENT. See page 14
Connecting rods *	CJ only	SCJ only	DIFFERENT. See page 20
Pistons *	CJ only	SCJ only	DIFFERENT.
Piston rings *	CJ only	SCJ only	DIFFERENT
Flywheel / Flexplate	CJ only	SCJ only	DIFFERENT. See page 60-61
Crankshaft balancer / Dampner *	CJ only	SCJ only	DIFFERENT. See page 12-13
Crankshaft spacer *	CJ only	SCJ only	DIFFERENT.

* These items cannot be interchanged individually; however, they can be as an entire set. Mixing these parts will cause an engine im-balance. These are the parts that distinguish a CJ from a SCJ engine.